LOÎKE (

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Cost: Thesis Mid-Term Report

Pushers In Our CAF?

The few of you sheltered engineers out there who have yet to notice will be surprised by this article. Most of us, however, are well aware of the foul presence in the Sandford Fleming cafeteria (besides the food?-ed.). I am referring to the pushers. Constantly shoving it in our faces and pretending that they're doing nothing wrong; like we can't see them.

"We are tired of being victims." says Montana Otto Molehill, the leader of Pushers

By: Walter Stoddard NY9T5 Go Home (PGH) a student run organization dedicated to driving out these undesirables. "It is time people took a stand,

instead of just watching it happen around them." Sadly, Molehill's group is only twenty strong. I asked him



Innocent by-standers doing business as PUSHER commits his crime!

what the trouble was. "The trouble is, no one cares! And the pushers know it, too. I once saw a pusher doing... well... her thing right in front of me! When our eyes met, do you know what she did? She smiled. That was it! Smiled as it to say, 'Hey, everyone does it'!"

According to Molehill, most of the pushers are in their first year. He claims that the f!rosh pushers eventually "get the message and give up or leave, but there are still upperclass pushers who just don't get it; we don't want you here! For the last time, they're PULL DOORS!"

Toike Staff Locked Out Indefinitly

By: James BME 9T5

Hundreds of Toike Oike Staff Members were locked out of Toike facilities as a massive war erupted against the editurd. Rumours abound on how the this started, but the most creditable claims stated that the editurd was with holding payment from the Staff. This resulted in a whole bunch of name calling and a violent thumb wrestling match - one person ended up being rushed to The First Aid Kit.

"That guy's crazy", said the wounded. "He just

grabbed a bottle and started thrashing, and it was a full bottle, too. As I was licking up the spilled beVerAGES, I heard him demanding stuff like: "Where are MY articles?! haven't written YOU anything! Why are YOU eating?!" If he doesn't let us have the pizza soon, it's going to get worse."

When another staff member was asked about the battle, she had only this to say: "We could have taken him, if only we hadn't had so many beVerAGES."

> The ruthless

dictatorial editurd has decreed that none of the staff members will get any of their free pizza and drinks until ten hundred thousand million billion cooling trillion articles have been written.

The Toike Investigative Team was the only person allowed in the office to speak with The Editurd in Chief. He dictated that "The lockout will stay in place until new submission contracts are arranged with the staff!"

The staff has petitioned for humanitarian aid, but so and far, only pencils, paper, and

the occasional beVerAGE have been allowed through.

As a last attempt at the pizza and beVerAGES, one couragious, starved and genius-like BME 9T5, armed with his swissarmy knife, reminded the Editurd that he needed a bottle opener (which he possesed) to open his beVerAGES. After disappearing behind the office door, the only words heard from the BME were: "Hey! You picked all the pepperoni off the pizzas! <BURP> Pass me another beVerAGE, would you."





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NO COVER, NO RESERVATIONS. NO CLASS AND NO LINE-UPS ON SUNDAYS... YET!



Eng Soc's Official Newspaper

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Disclaimer:

The Toike Oike is a humour newspaper designed to entertain and (mis)inform its readers. The opinions expressed within this newspaper are those of the authors, and do not necessarily represent those of the U of T Engineering Society, unless so indicated.

Questions, comments, articles and bomb threats may be forwarded to:

The Toike Oike c/o Editur-in-Chief 10 King's College Rd. Sir Sandford Fleming Bldg. Rm B670 M5S 1A1

A word from the Editurd

One more Toike issue published. This one was a little bit more work with Skule™ but after a long, **long** Sunday night it's finally done. And if anyone doesn't enjoy this one, they can suck on the 2 lbs of coffee rinds that i've gone through while finishing up tonight/last night/this morning.

Fortunately, with all the coffee that I've consumed, my typing speed has tripled. And even though my ability to think straight had been hampered, I should still be able to finish this editorial off in half the regular time that will give me a solid hour of sleep before my first class.

A lot of people have been wondering what that strange card game is that everyone is playing (even after reading the Cannon article). The game is called MAGIC: The Gathering. And if I were you, I'd keep as far away from it as possible - Addiction Research Canada is still performing tests with it. During the summer, I learned how to play off a friend at McMaster and they suffered the same fate that we have... we've been struck with magic fever!

You might have thought that Net

Trek was harmful to your existence at Skule™... MAGIC, in my humble opinion, is worse! All those booster packs! All the different kinds of decks you can make! All the excitement it can provide you with in an otherwise dull curiculum! All the money it can suck from your OSAP!

My only waming for those of you who're trapped with this disease is save some of your MANA because at the end of term you're going to need some REAL MAGIC to pass your exams!

With all these sports strikes, particularly the NHL strike, some of the personal plans that I had when I became Editurd went down the tubes. Previous Editurds used their power to get into clubs without cover or to get backstage at concerts. Me, I wanted to see if I could get some press passes to hockey games.

So now that my bubble has been burst (for now, anyway) I'm looking to other avenues to follow - ways that I can abuse my position! I thought it would be cool to get onto one of the local radio stations - particularily the Humble and Fred show on CFNY! I usually wake up with

them in the morning (on the radio, that

Think of it (as a trade):
The Toike Oike Steals the Humble and Fred Show....

Humble and Fred Steal the Toike!

I've got a small plan mapped out that, hopefully, will be successful:

1. I will mention the Humble and Fred show in my editorial (done).

2. I will compliment them! Humble and Fred are cool! Humble and Fred are famous! Humble and Fred are powerful! Humble and Fred can do Computational Fluid Dynamics! (there, done)

I will mail them a copy of the Toike.

Then the Toike will be heard by MILLIONS!

Editurd'n Chief

Lin Kayland



Engineering Alumni Association

University of Toronto

An open letter to all members of the University of Toronto Engineering Community:

I am writing this letter on behalf of the University of Toronto Engineering Alumni Council to express our concern over the recent events regarding SkuleTM Spirit. As you may or may not be aware, certain constituencies have indicated that they wish to participate in the Engineering Society Orientation program.

This letter is not intended to criticize people's words or actions, but rather to emphasize the importance of SkuleTM spirit to the undergraduates, alumni, and faculty.

The Engineering Society is by far the most active society on campus. One only has to list it's numerous accomplishments in order to realize the truth of this; the Toike Oike, the LGMB, Engineering Athletics, High School Liaison and the list goes on.

All of these activities are organized by a group of dedicated volunteers who are also juggling a full undergraduate course load. Many time it is said that the Engineers are the only students on campus with any spirit left.

It is this spirit which has made the Engineering Society the only student society on campus which funds its own Employment Liaison Office, dedicated solely to the expanding employment opportunities for engineering graduates.

It is this spirit that has produced SkuleTM firsts which were subsequently adopted by the rest of the University: Shinerama, and GRADitude.

It is this spirit which inspired the Class of 9T4 to pledge over \$158,000 back to SkuleTM, smashing every University record. For the 10th straight year, Engineering had the highest leaving class pledge of any faculty or college graduating class at U of T.

It is this spirit which inspired the Levy Fund, where every full-time Engineering undergraduate donates \$100 per year to help upgrade undergrad lab facilities. Sometimes, in all the enthusiasm over their accomplishments, we take SkuleTM spirit for granted. Spirit is instilled within our undergrads from day one, and this is done through a united Orientation program in which all students from all years and departments can participate in the same events. By splintering off and pushing our own agendas on factions of the student body on the first day, we destroy that element of unity which is so important to SkuleTM spirit.

Therefore, we of the Engineering Alumni Council urge those who have concerns with the current Orientation program of the Engineering Society to discuss then with the Society, the Engineering Alumni Council and the administration. It is only by working together that we can preserve and strengthen Skule IM spirit.

Yours very truly,

B.M. Businewski

Peter Gryniewski President Engineering Alumni Council

Bitchin' and Whinin' (Letters to the Editurd)

Newsgroups: ut.ecf.comp9T5,

To: redford@skule.ecf. toronto.edu Subject: Open Letter to the TOIKE

Sender: HADI SALIM JAMAL <hadi>

From: I, man

Editurd;

It is my opinion that the latest issue of the Toike sucks big time!

If I may quote you (page 3):

.... BUT, I and many of the staff members think that if you dont piss yourself laughing at least once ... you're welcome to your money

well, the only piss I see is on the Toike and ,yes, I admit I did it! Josephine Squoolle (if you do exist! page4) you've been had! dont let the old Toike fool you .. this one is a real stinking piece of crap. Although I have always found the TOIKE geared towards a particular crowd (one that hangs around Engsoc) I have mostly tolerated the otherwise xenophobic opinions/ jokes (which normally lack any creativity or are a copy from some un-credited source). I must say that at times i have found some propagated ideas disgusting; however, being a "hard-core" engineer ;-) I have always hung on there .. hoping that the next issue is actually gonna be on something more under-

This is the first issue of the year and that makes me really feel like puking on it .. so when are we gonna start seeing sexist, or maybe some homophobic stuff? Are these ideas expressed yours, mr. editurd, or do they reflect the general sentiments of engineering? I found the JOIKE on the two rabbits laced with racial implications. And the classifieds lacked any sense of entertaining value ... I found the one labeled "URGENT--PEY POSITION" particulary slanderous towards Koreans in general.

and FYI, the dept of electrical and computer engineering offers courses under the banner ECE not ELE (page5) And your artsie jokes are really lame ... I happen to know a lot of "artsies" who know more about computers and networking than half my computer engineering class. I wonder what that tells you about Industrials or Geos who populate the engsoc facilities.

[I am not picking on these two particular departments, this is a mere example] after all isnt technology synonymous with engineering? And I cant come up with any technology which doesnt associate with computers. Logically doesnt that make more than half the engineering faculty "artsies"? This includes, perharps, yourself or most of your staff (statistically speaking)!

I wonder if *you* mr. editurd had anything to do with this embarassing situation and whether it helps in maintaining some imagined macho image, or it's just a mere influence from some mentor or maybe inspiration from Sir God himself, I wonder how much of my skule fees goes towards upkeeping of your closed-cycle gossip tabloid because ... I want my MONEY BACK!!

IMHO, The Toike's days are OVER

Let's stop killing trees for opinions that are not worth the ink used. The Toike should be put online ... the contribution towards articles on it should be based on total anarchy. This would block morons like you, mr. editurd, from "representing" engineers.

PS: Go ahead and print this in your paper if you find it amusing enough!

Cheers => I man, VoW, I am back!

HADI SALIM JAMAL.

you've Everything that mentioned in your letter is contradicated elsewhere in it. If you're looking for sexist and homophobic material, go back to the 70's & 80's... that kind of atitude is no longer tolerated in Engineering and belongs buried in the past. You're reading too much into the text of the jokes the rabbit joke was only about RABBITS and the Korean joke was a play on the political troubles from the summer. As a "hard-corè engineer" surprized that you didn't know that the artsie jokes are ment in a spirit of friendly rivalry - I too have many friends in the Arts (Continued on page 10)

Message On behalf of the Faculty of spirit. My thanks to all the

Applied Science and Engineering, I offer congratulations to Johanne Heald, who in her final year of Engineering Science, is the winner of the Canadian Engineering Memorial Foundation Final Year Scholarship. This is a very prestigious award, with strong competition from women across the country. The presentation of this scholarship will take place on Thursday, November 10th at CCPE Canadian Engineers' Award Gala in Ottawa. Good work Johanne!

I want you to know that many favorable comments in Orientation were received in my office. Only a couple of unfortunate incidents marred the otherwise well-run week. We should all continue to strive to meet the expectations of the University while maintaining the SkuleTM students and colleagues involved in putting together a very successful Orientation

The Strategic Planning Steering Group continues to advise me on the preparation of the Faculty's Strategic Plan through to the Year 2000. There have been nine meetings this year and I thank all members of the Group, both past and present, for the time they have devoted to this very important exercise. Jennifer Reid, 4th year Civil is a member of the Group. She replaced Brenda McCabe who graduated earlier this year. External review teams have visited all ten Departments, Divisions and Institutes of the Faculty. You will be pleased to know that all programs have been assessed as being either pereminent, or among the very best, in Canada. This

feedback from the review teams is both gratifying and invaluable to me and the Chairs and Directors in defining objectives and preparing the Faculty Plan. Many students were involved in meetings with the external reviewers over the summer and fall. Students who would like to provide additional input should feel free to approach me directly. Call 978-3131 for an appointment.

Jean

The overall goal of the Plan will be to make the Faculty pre-eminent in all areas and have it recognized as such. This will make the Faculty's programs attractive to the very best students across Canada and further afield.

11 lat Charly

Michael E. Charles Dean

TOIKE MAILROOM

Greetings. We are the Angry Serfs, the newest members of the world renowned and seldom respected engineering newspaper, the Toike Oike. The gracious powers that be have honoured us with a small section of this page in which to write what we hope will be a monthly column. However, our ideas for articles were rapidly dismissed, and we were finally patronizingly informed that all we would be trusted with was responding to incoming mail.

serf, n. person bound in the service of a landowner; any person in servile subjection.

an-gry, a. displaying or feeling anger; raging.

BORN ANGRY: No, we weren't born angry. We grew angry. Who are we? We're a couple of Mek Flrosh who walked into the Toike Office hoping to find the venerable Mecca of journalism. What saps we were. We found a bunch of hacks posing as editurds and wound up in the mailroom reading your garbage masquerading as mail. It's not a mailroom per se, but rather a remarkably unimpressive aluminum structure, featuring "climate sensitive reverse insulation" which tends to exponentially magnify the weather outside. It is amazingly energy efficient (no electricity) and pest free (that is, as long as we pay that 30lb lab rat his protection" fee).

But that's enough self-pity. This article was going to be about

Anger spawned by two hour commutes daily from Too-Damn-Far. Ontario, which as everyone may or may not know is a suburb

of Toronto

Anger weaned on Soree-nospeek-good-Canada lecturers and ridiculous class schedules (hmm... first, GB202, then RB211, then....shit, GB202).

Yep, we've got anger in bulk around here and we dish it out to all free of charge. How? VOLUME, class. Our beam of sarcasm is set on widest dispersal. And kids, our aim is lousy.

We are your classmates.

You are wearing your blue SAC "I'm a F!rosh, harass me!" t-shirt because you think it's kinda cool.

It's not.

We're pointing, and whispering and laughing behind your back. And we're going to do it until you cry. Now run home and hide underneath your bed....wimp!

WOW! What an outpour of sulphuric. We feel better now, thanks. That's enough venom for

Now, on to business. Some of you may be wondering why we support the seemingly cruel and demeaning treatment by our small-time editurd on a power trip? The truth is, journalism is in our blood as much as engineering is. When we write some, we'll let you know

Speaking of bad writing, we are subjected to it everyday. We are talking about this sewage on paper that our readership calls

And without further delay, here is your doo....

What's up with this column? It's pointless and stupid. Don't you guys have anything better to do with your lives? Joe, Mech 9T8

Your subsistence disgusts us. Go play on the highway.

I don't get it, how the hell do I get my parents to pay for my

Lex, Chem 9T7

Simple. Tell them you need the money for a PSAT/MCAT/ LSD/SAT/PHD/DAT/LGMB review course. If that doesn't work, wait until they go out of town and have a moving sale. Sell everything-the fridge, the washer, the dryer, etc. Then when they come home, tell them the house was robbed. This works every time.

Hi, my name is Kathy. I think the Toike rules.

'Cuz you don't get too many fan letters, I think I should be commended because I'm the first EngSci to write.

Kathy, EngSci 9T8

Gosh, you mean that of all the EngScis you are the first to learn how to write? Your parents and your faculty must be proud.

Ah, a bonnie cereal! But it's not oatmeal! Actually, it's more like horseshi...

Dave, Geo 9T7

It's more like editing, Dave. Ah, we love the smell of freshly cut copy in the mornina.

That's it kids. Oh, wait. Any resemblance between this column and a certain other column in a certain other publication (certainly not TW Snowboarding) is purely coincidental. If anyone asks, this column does NOT exist.

(We hope the residents of nonexistence do not mind some more company.... hello BFC!)

If you'd like your pitiful correspondence mauled and ridiculed, drop it in the Toike Oike mail box c/o The Angry Serfs.

JOIKES! JOIKES! JOIKES!

Ok folks, since ST:TNG wont be playing any new episodes for us to analyse anymore, here's the last of the Tep Ten lists:

Bumperstickers on the USS Enterprise: 10- Our other starship separates into 3 nieces!

- 9- One photon torpedo can ruin your whole day...Think about it.
- 8- Honk if you've slept with Commander
 Riker!
- 7- Guns don't kill people...Class 2 phasers
- 6- Zero to Warp 9.7 in 13 seconds
- 5- Caution...we have a trigger happy Klingon at tactical
- 4- Buy a ST:BNAD album!
- π- If you can read this...don't you think you're a wee bit too close?
- 3- Have you hugged a Ferengi today?
- 2- We brake for cubes
- 1- Wesley on Board!

Surfire Signs that Star Trek is Taking over your Life:

- 10- Saying, "Make it so" in casual conversation.
- 9- Indignation that the periodic table doesn't include dilithium and tritanium
- 8- Able to say variable phase inverter in a sentence without excessive thought first.
- 7- Have figured out the Star date system.6- Sudden urge to wear lots of Lycra.
- 5- Scanning the shelves at local liquor stores for synthehol.
- 4- BNAD albums are easy to replicate.
- π Memorization of the crew's authorization numbers.
- 3- Forgetting that today's elevators don't have voice interface.
- e- Actual serious thoughts about buying that \$300 model of the Enterprise from Franklin Mint.
- 2- Understanding Klingon.
- 1- Lecturing any prof on how transport-

Favorite Activities of Cpt. Jean-Luc

- 10- Ordering Earl Grey tea from the computer, them smacking himself on the forehead and saying, "I could have had a V-8!"
- 9- Yelling "Punchbuggy!" and hitting Riker's arm whenever he sees at shuttle craft.
- 8- Screwing around in the holodeck when he ought to be on the bridge
- 7- Sportlighting unsuspecting crewmembers with the glare from his forehead.
- 6- Lecturing everybody on why it's rude to fire the phasers at other life-forms
- 5- Sending crank subspace messages to Star Fleet Command asking if Dick Hertz is there.
- 4- Listening to his BNAD album.
- π- Inviting Beverly Crusher into his quarters so he can show her "a real Picard Maneuver."
- 3- Ticking off Romulan commanders during tense confrontations in the Neutral Zone by asking, "Are those Bugle Boy jeans you're wearing?"
- 2- Telling crew in menacing, Dirty Harry voice, "Go ahead, make it so."
- 1- Putting bannana peels on the transporter pads just before an away team beams back up.

-A husband sits in the delivery room watching his wife give birth. The doctor stoops in the catching postion and... POP! Out it comes! The newborn looks up at the doctor and says "Are you my daddy?" The doctor chuckles and says, "No, I'm the doctor!" The baby crawls up the bedsheet and sees the nurse... "Are you my daddy?" The nurse smiles, "No, I'm the nurse!" Further along he finds his mother and asks, "Are you my daddy?" and she responds, "No, I'm your momy. Your daddy is over there in the corner." The baby looks over and sees a man shaking in the corner of the room. Crawling across the floor, the baby climbs up the father's leg and up his shirt. Looking into his eyes the baby says, "Are YOU my daddy?" The father says proudly, "Yes son, I'm

your daddy!"
"Oh" Says the baby. The baby starts punching his father in the forehead yelling: "How d'ya like that daddy, how d'ya like that!"

-We all know that the reason rabbits survive in this world is because the multiply so fast (and so the TOIKE OIKE can use them in JOIKES). Well, one day, a father rabbit decides it's time to let his son know the secret to multiplying so quickly:

"Son. I'm going to let you in on a secret that my father told me, and that my father's father told him. It's the secret to reproducing so quickly." The father rabbit takes his son into another part of the rabbit den and points out three female rabbits that have volunteered to show the young rabbit the secret. "Now, watch carefully."

The father rabbit gets behind the three female rabbits and ... ONE! TWO! THREE! He mates with all three of them very quickly. "Did you get that, son?"

The son, being surprised at the speed at which his father completed the task, was unsure of what happened, "Can you do it again, I didn't quite see it all."

So the father gets behind the three rabbits again and ... ONE! TWO! THREE! "Did you understand it that time, son?"

"Yes, I think so."

"OK, then come over here and give it a try." The father moved to one side to let his son get into possition. The younger rabbit gets behind the three rabbits, spits on his paws in preparation and ... ONE! TWO! THREE! FOUR! ... "Oopps! Sorry,

-What's the difference between kinky sex and perverted sex?

Kinky is using a feather to tickle your partner... perverted is using the whole chicken!

-What's the other True Meaning of Yucky?

Blowing your nose and missing the cleanex... or the old Eng Com fridge!

-A young priest at his first mass was so afraid that he could hardly speek, so before his second week in the pulpit he asked the Monsignor how he could be more relaxed. The Monsignor, a veteran at his work, said "my son, this Sunday it might help if you put a martini or two in the water pitcher instead of water, after a few sips everything should go smoothly. So Sunday came and the young priest did as the Monsignor suggested and he talked up a storm. After the sermon, he asked the Monsignor for his comments. The Monsignor replied "Just fine. except you should remember the following:

- Next time sip the martini rather than gulp it down by the glass full.
 There are ten commandments,
- 3. There are twelve desciples, not

not twelve.

- 4. Davis slew Goliath, he didn't kick the shit out of him.
- 5. We don't refer to the cross as the bia "T"
- 6. We don't refer to our Saviour Jesus Christ and the disciples as "J.C. and the boys"
- 7. We don't refere to the Father, the Son and the Holy Ghost as "Big Daddy, Junior and the Spook"
- 8. Next Sunday there is a taffypulling contest at St. Peter's not a Peter-pulling contest at St. Taffy's 9. The idea of a drive-in confession is excellent, but the sign "toot and tell or go to hell" has got to go.
- 10. We say the Virgin Mary, not "Mary with the cherry"
- 11. Last but not least, we don't refer to Jesus being nailed to the cross as "having a shit Easter"
- What was the most popular saying in India last month?

You dirty rat, you've killed my brother!

- What do you call the baby of a prostitute?

A brothel sprout!

Bad Good Varsity Toike Freuds Theories Newtons ton 3 S.A.C vacc Slug's Kg's Everyone Else Comps Turing UNIX ms-dos Arts Darts Commodore S.G.I. Snail-mail E-mail Alcohol-free beer Free alcohol+beer Hair-nets Internet Effect. Tech Writ Spell Check Artists Ray-tracing Bud SUDS Caculus Calculators

To all Comps and Elecs:

Eng. Soc.

+Environment

Abstract: Mouse Balls are Available as FRU (Field Replacement Unit)

Eng. Soc.

Mouse balls are now available as FRU. Therefore, if a mouse fails to operate or should it perform erratically, it may need a ball replacement. Because of the delicate nature of this procedure, replacement of a mouse ball should only be attempted by properly trained personnel.

proceeding, Before determine the type of mouse balls by examining the underside of the mouse. Domestic balls will be larger and harder than foreign balls. Ball removal procedures depending upon differ manufacturer of the mouse. Foreign balls can be replace using the pop-off method. Domestic balls are replaced using the twist-off method. Mouse balls are not usually static sensitive. However, excessive handling can result in sudden discharge. Upon completion of ball replacement, the mouse may be use immediately.

It is recommended that each replacer have a pair of spare balls for maintaining optimum user satisfaction, and that any user missing their balls should suspect local computer science students of removing these necessary items.

 What does reading the VARŞHITY and FARTING have in common?

You never want to get caught doing either in public! (and if you do, tell them you only do it once in a while!)

University of Toronto Faculty of Applied Science and Engineering Technical Proficiency Test (TPT) September 7, 1994

A (No written aids)
II (All non-programmable calculators)

There are five (5) questions to this lest. Attempt all questions. State any assumptions and show all calculations.

1. If a and b are complex numbers, show that (i) $|a - b|^2 - |a - b|^2 = 2(|a|^2 + |b|^2)$

(11) Find all z such that z -2z +2=0

Hint. The depth y(t) of the liquid in the tank satisfies the differential equation as shown below, where α is the whole area, A(y) is the horizontal cross sectional area of the tank at height y and $g = 9.81 \text{ m/s}^3$.

$$A(y)\frac{dy}{dt} = -\alpha \sqrt{3}gy$$

Air drawn from the vicinity of electrical equipment was passed at the rate of 2.75Umin through an aqueous solution of KI, in which O_1 was absorbed. The reaction (not balanced) of ozone with todide tons is:

a) Balance the above equation by adding water and hydroxide ions as needed. Give the balanced half-reaction and indicate which species on the left-hand side of the balanced net equation is the oxidizing agent, and which species is the reducing agent. The 1₂ generated during a 14.5 minute collection period required a 6.12 mL titration with 0.0156 M Na₂S₂O₃. The balanced reaction of rodine with outdet is:

The reaction (not balanced) of throsulfare with thriodide ion is:

1, + S.Q. . <---> 1' + S.Q. .

- b) Balance the above equation, adding water and protons as needed. Give the balanced half-reactions and indicate which species on the left-hand side of the balanced net equation is the oxidizing agent and which is the reducing agent.
- The statement: The orbit of each planet is an ellipse, with the Sun as a focus, is best described by which one of the following statements? Explain your choice in approximately 50 words to obtain full credit.

 - Newton's (third) law of action and reaction
 the only in the limiting ease of the small satellite and spherical bodies
 an observed phenomenon
 Kelvin's first law of planetary motion
- 5. The freebody diagram for a truss is shown. Determine the internal forces in all members



Geraldine Sanlos

[Group F]

St. No: 94 NO Calculator P

4. The answer to the question is the letter d, (that is, the (i 4) answer given marked "d") that I chaose the letter d for a my answer because I vaguely remember the name & Kelvin from my physics class and it having to (i) do sometime with the subject of placetry (40) motion (15 this 00 words jet?)

50 wids

Chris Masterson 94

No Calculator

It doesn't really matter which of the closes hist discular the statement because the little that the planets obtained his a might that was propertiested by an early group of Nanji like extrements. The whole countries particulating a color orbits was a play to lead the Cott in church and all powerfunctions of the was a downward spinal of despair and confusion. In restrict, the flanets oscillate in a straight him path

1.6, la-b/2, la, b/2 = 2(101+16))

S'm cony, but some the finited love bolitony
to be selling with complex numbers. S' we lood some trouble dealing with somples much spr fact s find must mention fact 10 mildly confusing. Do you think that will hunt my change in long dei? I heart there are sometimes numbers as big 00 21 n 22

> Scott Shingler No calculator Croup F!

apparently it apont my summer having too much fire upon it should have exert every waking minute overeining my notes. I also believe they should talk "vientation" "disorientation".

Now it really know why the F! is in F!rogh!

LEARNED MIST OF THIS
CANT SEEMED TO REMEM REVIEWED & REMEMBER SHOULD GROW (1) FI ROSH. Kevin WALL Group B Tosph Kini Ben ene like to live in collained tanks, so there is no incontre for it to leave its himble glode. < Inliatee Frosh Group A What's an axis? Elec. Dyt = - 0 12gy deep mich will, first oball, I don't think that a tank containing any type of liquid should be leaking, and, swordly, it the actual right ensurer is accordly, it the actual right ensurer is according to the object them without at the state of the st -A = 0.01 m2 formething like 5hrs, then wouldn't somebody have noticed after an hour or two? at that this question encourages doppiness and best either had design as bad upterp (But railly, I have with a little review of calculus, it could're done This question.) (1) Unable to recall NEIL GEHANI (2). Unable to recall (3) unable to recall
(9) Unable to recall
(9) I already ansswerd for questions instead of 3! Anthony Grbic Frosh Group E 94 Meluin's first bus of plantary motion states that the orbit of each

ELT

HAIE

of each planet is an ellipse, with the sun at one of the focil. There is nothing more to say. That is the law and that's what it says.

I think I should get full mor's +1115 = problem . There 'words =

) Z8 +2=4+2=0 Lot Z = X Fish A Nonis 28-224 =- 2 -y +2x = - 2 Ld 28=4 These ore complex numbers and as such we beyond my undostanding. I like simple numbers. A is a nice, simple number. 5 is better, because 2 sis give you 10. simple.

whee I like riding whee this orbital ellipse. Rachna Aganual Frash group C. which icauses me to believe that (a) is the correct answer. The valanet goes round tround to round ... (I know it was a poor try, but when you can't remember, you. CAN'T!!)

4. The orbit of each planet is an ellipse, with the sun as Kristina Kukk o focus. is Kelvin's first law of planetary motion.
This is all that I was told in high school, so. SHARP 546 this is the answer that I chose. Possibly, some other teachers may have explained this law, but I think my teacher was more concerned with the basics of planetary motion.

boy... it's not Easy being a

Prosh imperior notor... i did this

somewhere but i don't remember

any more...

Wait i meant i saw this

some where before but i couldn't

Solve it there wither

(Z = sh + it

Sh and I are red

This shif... where ded they get

this steff... where ded they get

this steff... when well. looking

at this two dump frosh next to

me don't help any... at all.

i near they know NAH...

A(g) dy = -x 12gg.

god dann fluid question

Trevor Mills

 $||(a-H^2 + (a+b)^2 = 2(|a|^2 + |b|^2)^6 \times ||a-b|^2 + |b|^2 = 2(|a|^2 + |b|^2)^6 \times ||a-b|^2 + ||a-b$

However, a and b being such complex little fellows, have been in fact habitating a small white have with a green ficket fence have been multiplying for years and years for generations x any y

i. ab = 2x + y (they have 2x children)

This must be a trick question

it simply can't be answered

the to the fact that we dan't

know the chemical make up of the
tank, nor do we know the viscosity

of benzene. However if we were

to assume the tank was made of
a durable plastic (follymer for those
chem folk) and the Benzene had
a viscosity similar to a BEVERage
the total time would be 0.85 seconds
This is the basic premise behind

Aunnelling.

pk there's this Juy kelvin is his mank that planetury mechanics was his grame. He calculated orbits and all the like while riding around on his three wheelbit. He said "It's through no magic no hocuspica

He said "It's through no magic no hocuspece "the theme the orbit of each planet, is an ellips with the sun as a facus Well his friends all thought he was a know went to play with his good friend Hobbes.

So here endeth the lesson And thank nod it ends here it's time for some beverages for us Firosh engineers

Kevin WALL Group B

Kevin WALL Grows B.

(4) The ensure to B.

Why is it B? It's B become

B is such a perutiel, bountful,

bewittling letter B is the first

letter to B. my gifteenst o blad name.

B is to seems better of the alphabet.

B is to seems better of the alphabet.

B is to seems better of the alphabet.

Augustes, but is to oness of

life toelf. We all brown out o

amongst us known who BETA is?

Then ALIHA a assens. More work

is rymbolized by BETA. On this way

to perposen, all there must go

throug & beforethe in Ruch the

public the most important

reason to when the answer is

put the most important paper for which the ensure is b, will BE B. and HAS ALWAYS BEEN B, is that

GROUP B RULES!"

Va he welling to discuss any orgunsus over a nice cup of & beer.

Withdrawal? There is help!

Near un-professional hockey is being played by four teams in Engineering against other teams on campus in the intramural hockey leagues. So if you're getting that need to watch some ice hockey, check out the schedule below:

Div I

Sat, Oct 29, 6pm

EngineeringA vs ScarboroughA

Wed, Nov 2, 9pm

EngineeringA vs PHE

Mon, Nov 7, 7pm

EngineeringA vs Erindale A

Mon, Nov 14, 9pm

EngineeringA vs MEDS

Wed, Nov 23, 9pm

EngineeringA vs SMC A-Team

Wed, Nov 30, 8pm

EngineeringA vs ScarboroughA

Div II

Mon, Oct 24, 7pm

Skule B vs Woodsworth A

Fri, Nov 4, 7pm

Skule B vs Erindale B

Wed, Nov 9, 7pm

Skule B vs Devonshire

Sat, Nov 19, 5pm

Skule B vs PHE B

Div III

Mon, Oct 24, 11pm

Aerospace vs Architecture

Sat, Oct 29, 10pm

Sat, Nov 5, 8pm

Aerospace vs Scarborough C

Sat, Nov 5, 10pm

Mech Eng vs Vic B

Thur, Nov 10, 10pm

Aerospace vs Mech Eng (Ooh, Engineers going head-

to-head! Hey Walter, BNAD

event?!)

Thur, Nov 17, 10pm

Aerospace vs SGS Physics

Thur, Nov 17, 11pm

Mech Eng vs Architecture

Admission to Varsity Arena is free so come out and satisfy those hockey cravings!

Going into Hockey Compare As We Dare: Food vs. Sex

By: James CIV BIOMED 9T5 Walter GEO AERO 9T5

Hi, I'm James and I propose that food IS better than

Hi, I'm Walter and my field studies are not yet in.

Why is food better than sex? Well, a good meal can last for hours.

So can sex. If you hold it...

You get cramps. Food, you can have with lots of people, or just by yourself.

Same with sex, depending on how you define it.

Eating can last until the day you die.

Well, so can sex... if that's what kills you. Some people even fantasize about 967-... it's 1-976-. dying "IN THE ACT".

You can die from eating, too. Especially if it's refried, jalepino-laced, bean buritos. Food has the advantage of availiblity. It grows on trees, vou know.

That is not necessarily an advantage. If you're into the fast food scene, sex is as easily obtainable, with the same risk of heartburn, or getting burned, anyway. Besides, sex doesn't grow on trees, but it can be fun in

I wouldn't know, I'm sure. I still say that food is easier to get. With one quick phone call, you can have a pizza at your door in under 30 minutes, or free.

Sex has that feature, too. The number just doesn't start

But the pizza won't cost as much, and without food, you'll die. Without sex, you'll

Who would call that living?

I thought your field studies hadn't come in yet.

Well, ahh, what's your next point?

Food studies are easier to perform.

Sex studies may take a little more energy, but they're well worth the effort.

I've never heard of anybody getting in trouble for tasting different kinds of fruit.

Well, of course! It depends on how well you know the owner of the orchard...



29th, 1994)



FREE PARKING AFTER 6 P.M.

Must show student I.D.

Offer Expires Nov. 1, 1994



Dear LGMB,

I am writing this letter to thank the LGMB for serenading my residence just before frosh week started. Even though it woke me up at a very early hour I did not mind. It brought back memories of the fun times that I had in engineering and reinforced that engineers are not afraid to enjoy themselves in-between scholastic endeavors. As the president of my college I expected that many people would demand that I address the disturbance, however only one person appears to have been adversely effected. I think that this person has lost touch with youth and the fun that youthfulness sometimes requires. I feel that this person and others like her need to lighten up and begin enjoying their youth while they have it. As far as I'm concerned groups like the LGMB should make more disturbances to liven up what is becoming a very mundane school spirit at U of T.

Anoymous

Dear Anoymous,

Wow! A fan! (Can we call you a fan?) We don't have many fans or at least none that admit it publicly... oh, I guess we still don't. If you truly want to hear more of our euphonous cacophony, buy an album (We've put out five so far).

Walter Stoddard On behalf of the LGMB

Albums available at the Engineering Bookstore (12-2pm daily)





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(Letter to the Editur cont.from page 4)

and Science programs and Ali Ansari some of them love reading Chem 9T5 + PEY the Toike!

I think that you should drop by EngSoc and see that goes into the Toike is memo: first screened by myself and my staff, and then by separate Review TO: Commitee before it goes to print. Care is taken, in this FROM: way, to keep racist, sexist, and homophobic comments and jokes from DATE: being printed in the Toike.

"geared towards а particular crowd" this is probably because its always the same people submit material. submitting yourself?

Editur-in-Chief ees

NEW RES

The TIT infiltrated the what goes into the Toike faculty this summer and he and what doesn't. Material intercepted the following

ALL EMPLOYEES

DEAN M. CHARLES

OCT. 20, 1994

As for the Toike being RE: RESTROOM TRIP POLICY

In the past, employees that are contributing, were permitted to mak e trips Submissions are not to the restroom under informal restricted to Engineers only. Students from ALL guidelines. Effective Nov. 1, faculties are welcme to 1994, a Restroom Trip Policy You (RTP) will be established to believe there is a "lack of provide a consistent method of creativity"? How about accounting for each employees' something restroom time and ensuring equal treatment of all employ-

Under this policy, a "Restroom Trip Bank" will be established for each employee. The first day of each month, employees will be given a Restroom Trip Credit of 20. Restroom Trip Credits are nontransferable.

Within two weeks, the entrance to all restrooms will be equipped with Per sonnel Identification Stations and computer linked voice print recognition devices. Before the end of October, all employees must provide two (2) copies of the voice prints (one normal and one under stress) to the Human Resources Department. The voice print recognition stations will be operational but not restrictive for the month of October. Employees should acquaint themselves with the stations during that period.

If an employee's Restroom Trip Break balance reaches zero, the door to the restrooms will not unlock for that employee's voice until the first of next month. In addition, all restroom stalls are being equipped with timed paper roll retractors. If the stall is occupied for more than three (3) minutes, an alarm sounds, the roll of paper in the stall will retract, the toilet will flush and the stall door will open. If the stall remains occupied, theoccupant's picture will be

The picture will then be posted on the bulletin board in the main hallway. This is being done to eliminate DILLY DALLYING in the restrooms. Anyone whose picture appears three (3) times will immediately be terminated.

If you have any questions about this new policy, please contact the Head of Human Resources.

SkuleTM Books are now on sale in the atrium. 12-2pm daily They're only \$10! (\$2 extra for gold leaf personalizing)



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The True Meaning of Yucky

Let's just take a quick took at the history of baby- having. For thoussands of years, only women had babies. Primitive women would go off into primitive huts and groan and wail and sweat while other women hovered around. The primitive men stayed outside doing manly things, such as lifting heavy objects and spitting.

When the baby was born, the women would clean it up as best they could and show it to the men, who would spit appreciatively and head off to the forest to throw sharp sticks at small animals. If you had suggested to primitive man that they should actually watch women bave babies, they would have raughed at you and probably tortured you for three or four days. They were real men.

At the beginning of the 20th century, women started having babies in bospital rooms. Often males were present, but they were professional doctors who were paid large sums of money and were masks. Normal civilian males continued to stay out of the baby-having area; they remained in waiting rooms reading old copies of "Field & Stream", an activity that is less manly than lifting heavy objects, but still reasonably manly.

What I'm getting at is that, for most of history, baby- baving was mainly in the hands (so to speak) of women. Many fine people were born under this system. Charles Lindbergh, for example.

Things changed, though, in the 1970's. The birth rate dropped sharply. Women started going to college and driving buildezers and carrying briefcases and freely using such words as debenture. They just didn't have time to have babies. For a while there, the only people having babies were unwed teenaged girls, who are very fertile and can get pregnant merely by standing downwind from teenaged boys.

Then, young professional couples began to realize that their lives were missing something - a sense of stability, of companionship, of responsibility for another life. So they got Labrador retrievers. A little later, they started having babies again, mainly because of the tax advantages. These days you can't open your car door without histing a pregnant woman. But there's a catch: women now expect men to watch them have babies. This is called

"natural childbirth", which is one of those terms that sound terrific but that nobody really under-stands. Another is "pi-i balanced".

At first, natural childbirth was popular only with the hippie-type, granola-oriented couples who lived in geojestic domes and named their babies things like Peace Love Under-standing Harrington-Schwartz. The males, their brains badly corroded by drugs and organic food, wrote smarmy articles about what a Meaningful Experience It Is To See A New Life Come Into The World. None of these articles mentioned the various other fluids and solids that come into the world with the New Life, so people got the impression that watching someone have a baby was just a peck of meaningful fun. At cocktail parties, you'd run into natural childbirth converts who would drone on for hours, giving you a contraction-by-contraction account of what went on in the delivery room. They were worse than Moonies or people who tell you how much they bought their houses for in 1973 and how much the houses are worth today.

Before long, natural childbirth was everywhere, like salad bars, and now, perfectly innocent civilian males all over the country are required by federal law to watch females have babies. I recently had to watch my wife have a baby in our local suburban hospital.

First, we had to go to 10 evening childbirth classes at the hospital. Before the classes, the hospital told us, mysteriously, to bring two pillows. This was the first humiliation, because no two of our pillowcases match, and many have beer and cranberry stains. It may be possible to walk down the streets of Kuala Lumpur with stained, unmatched pillowcases and still fee! dignified, but this is not possible in suburbia.

Anyway, we showed up for the first class, along with about 15 other couples consisting of women who were going to have babies and men who were going to have to watch them. They all had matching pillowcases. In fact, some couples had obviously purchased tasteful pillowcases especially for childbirth class; these were the North Shore couples, wearing gold and tennis apparet, who were pianning to have wealthy babies. They sat together through all the classes and eventually agreed to get to-

gether for brunch

The class consisted of sitting in a brightly lit room and openly discussing, among other things, the uterus. Now I can remember a time, in high school, when I would have killed for reliable information on the uterus. But having discussed it at length, having seen actual full-colour diagrams, I must say in all honesty that although I respect it a great deal as an organ, it has lost much of its charm.

Our childbirth class instructor was very big on the uterus because that's where babies generally spend their time before birth. She also spent some time on the ovum, which is near the ovaries. What happens is this: the ovum hangs around, reading novels and eating chocolates until along comes this big crowd of spermatozoa, which are tiny, very stupid, one-celled organisms. They're looking for the ovum, but most of them wouldn't know it if they fell over it. They swim around for days, trying to mate with the pancreas and whatever other organs they bump into. But, eventually, one stumbles into the ovum; and the happy couple parades down the fallopian tubes to the uterus.

In the uterus, the Miracle of Life begins, unless you believe the Miracle of Life does not begin there, and if you think I'm going to get into that, you're crazy. Anyways, the ovum starts growing rapidly and dividing into lots of little specialized parts, not unlike the federal government. Within six weeks, it has developed all the organs it needs to drool; by 10 weeks, it has the ability to cry in restaurants. In childbirth class, they showed us actual pictures of a fetus developing inside a uterus. They didn't tell us how these pictures were taken, but I suspect it involved a great deal of drinking.

We saw lots of pictures. One evening, we saw a movie of a woman we didn't even know having a baby. I am serious. Some woman actually let some moviemakers film the whole thing. In colour. She was from California. And another time, the instructor anneunced, in the tone of voice you might use to tell people that they've just won free trips to the Bahamas, that we were going to see colour slides of a Caesarian section. The first slides showed a pregnant woman cheerfully

entering the hospital. The last slides showed her cheerfully holding a baby. The middle slides showed how they got the baby out of the cheerful woman, but I can't give you a lot of detail bere because I had to go out for 15 or 21 drinks of water. I do remember that, at one point, our instructor cheerfully observed that there was "surprisingly little blood, really". She evidently felt this was a real selling point.

When we weren't looking at pictures or discussing the uterus, we practised breathing. This is where the pillows earne in. What happens is that when the baby gets ready to leave the uterus, the woman goes through a series of what the medical community laughingly refers to as "contractions"; if it referred to them as "horrible pains that make you wonder why the hell you ever decided to get pregnant", people might stop having babies and the medical community would have to go into the major-appliance business.

In the old days, under President Eisenhower, doctors avoided the contraction problem by giving lots of drugs to the woman in question, thereby knocking her out for the entire procedure. But it was pointed out that she was missing the most important part, and that the woman should be able to share the first, intimate moments after birth with the baby and father and the obstetrician and paediatrician and the standby anesthesiologist and several nurses and the person who cleans the delivery room.

The key to avoiding drugs, according to the natural child-birth people is for the woman to breathe deeply, really believing that is she breathes deeply, she'll get all relaxed and won't notice that she's in a hospital delivery room wearing a truly perverted garment and having a baby. I'm not sure who came up with this theory. Whoever it was evidently believed that women have very small brains.

So, in childbirth class, we spent a lot of time sprawled on these little mats with our pillows while the women pretended to have contractions and the men squatted around with stop-watches and pretended to time them. The North Shore couples didn't care for this part. They were not into squatting. After a couple of classes, they started bringing

little back-gammon sets and playing backgammon when they were supposed to be practising breathing. I imagine they had a rough time in actual childbirth, unless they got the servants to have con-tractions for them.

Anyway, my wife and I traipsed along for months, breathing and timing, respectively. We had no problems whatsoever. We were a terrific team. We had a swell time. Really.

The actual delivery was slightly more difficult. I don't want to name names, but I held up my end. I had my stopwatch in good working order, and I told my wife to breathe. "Don't forget to breathe", I'd say, or "You should breathe, you know". She, on the other hand, was unusually cranky. For example, she didn't want me to use my stopwatch. Can you imagine? All that practice, all that squatting on the natural childbirth class floor, and she suddenly gets into this big snit about stopwatches. Also, she almost completely lost her sense of humour. At one point, I made an especially amusing remark, and she tried to hit me. She usually has an excellent sense of humour.

alright, or, at least, alright for newborn babies, which is actually pretty awful unless you're a big fan of slime. I thought I had held up well for the whole thing when the doctor, who, until then, had behaved like a perfectly rational person, said, "Would you like to see the placenta?" Now let's face it. This is like asking, "Would you like me to pour hot tar in your nostrils?" Nobody would like to see a placenta. If anything, it should be a form of punishment: Jury: We find the defendant guilty of stealing from the old and the crippled. Judge: I sentence the defendant to looking at three placentas.

Nevertheless, the baby came out

But without waiting for an answer, the doctor held up the placenta, not unlike the way you might hold up a bowling trophy. I bet he wouldn't have tried that with people who had matching pillowcases.

The placenta aside, everything else worked out fine. We ended up with an extremely healthy, organic, natural baby, who immediately demanded to be put back into the uterus.

All in all, I'd say it's not a bad way to reproduce, although I understand that members of the flatworm family simply divide into two.

Common Penominators

By Sharleen Sy

WATCH OUT SPIDERMAN, 'CAUSE WE'RE INTRODUCING A NEW SET OF STUDENT HEROES...
THE ENGINEERING SOCIETY OF SUPER-MUTANTS ... THE Y-MEN!

AFTER REPEATED EXPOSURE TO HER THESIS PROJECT, THIS CHEM SUDDENLY GAINS CONTROL OVER



A 4TH YEAR CIV ACCIDENTALY DRINKS AN EXPERIMENTAL MIX OF MORTAR GIVING HIM SUPER STRENGTH & BONES OF REBAR...



AS A FOREIGN STUDENT FROM THE PLANET GEOJUICE, THIS GEO DIDN'T "FIT IN" UNTIL HE JOINED THE TEAM AS...



A MILD-MANNERED ELEC SPILLS JOLT COLA OVER HIS CIRCUITS LAB.



ARMED ONLY WITH HIS GIANT HP CALCULATOR AND AN IQ. OF 200, THIS OVER-STUDIOUS MY FROSH IS.



ORGANIZATION, THIS INDUSTRIAL CARNES EVERY ERGONOMIC TOOL NEEDED TO FIGHT CRIME ...

A MASTER OF EFFICIENCY &



A 3BD YEAR MMS STUDENT DISCOVERS
HE IS THE LONG LOST SON OF THOR.
AS HIS DENI-GOD POWERS EMERGE,
HE RECOMES.



A FREAK CAR ACCIDENT LEFT THIS MECH STUDENT PARALYZED.. UNTIL A MECH PROF. GOT HOLD OF HIM! NOW THEY CALL HIM...



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UNDERGOES A METAPHYSICAL TRANSFORMINA
BECOMING...



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